

# **KANSAS PUBLIC WATER SUPPLY CAPACITY DEVELOPMENT PROGRAM**

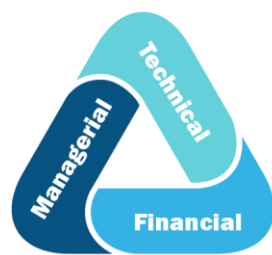
**Status Report  
for  
State Fiscal Year 2020**

**September 30, 2020**



**Kansas Department of Health and Environment  
Division of Environment  
Bureau of Water  
Public Water Supply Section**

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# **CAPACITY DEVELOPMENT PROGRAM**

**Public Water Supply Section**

A program of the Kansas Department of Health and Environment

The Kansas Capacity Development Program provides training, technical assistance, and financial planning assistance to help public water supply systems achieve and maintain the technical, financial, and managerial capabilities needed to protect the health of the citizens they serve.

## **INTRODUCTION**

This report is provided as required by Section 1420 of the 1996 Amendments to the Safe Drinking Water Act (SDWA) and to comply with EPA drinking water revolving loan fund Capitalization Grant requirements. Information is provided on activities conducted to implement the Kansas Capacity Development Assurance Program during State Fiscal Year 2020, for the 2021 grant.

The Kansas Capacity Development Assurance Program consists of two components: 1) New System Capacity Assurance reviews and permitting; and 2) Implementation of the Capacity Development Strategy for Existing Public Water Supply Systems. This report is organized by these two components. A copy of the Kansas Capacity Development Strategy and Report of Findings is available on the KDHE webpage: <http://www.kdheks.gov/pws/capdev/capdev.html>. Strategy Amendments 1 and 2 are also located on the KDHE webpage.

## **NEW SYSTEM REVIEWS**

During SFY 2020, two new system permit applications were submitted to the Kansas Department of Health and Environment (KDHE) for review and one new system permit was issued. Two new system permit reviews continue for applications received in previous years. The status of the permit reviews is listed in Table 1.

**Table 1 – New System Permit Review Status**

<b>Water System Number</b>	<b>Public Water Supply System</b>	<b>Status</b>
KS2004515	Public Wholesale Water Supply District #25	Approved
KS2012706	Morris Co RWD 2	Under Review
KS2115538	Hooray Ranch	Under Review
KS2105540	Pioneer Hi-Bred Research Center	Under Review

The New System Permit Application consists of two parts. Part 1 is the engineering and design component, which is reviewed and approved by the Engineering and Permits Unit. Upon approval of Part 1 and designated elements of Part 2, a letter of approval is issued authorizing construction of the public water supply system. Part 2 of the permit application is the technical, financial and managerial capacity assurance component. Before the system begins operation, the remaining elements in Part 2 of the application must be completed and approved. A final inspection must also be conducted and approval to initiate operations must be granted by KDHE. A permit for the completed project is issued upon a favorable final inspection report. There were no changes to KDHE's statutory authority or new system permitting process during SFY 2020.

The Capacity Assurance Strategy for new systems includes a review and evaluation component that the KDHE uses to determine if the review and permitting process is effective. KDHE employs EPA's Enforcement Response Policy (ERP) and Enforcement Tracking Tool (ETT) to analyze the success of the New System Capacity Assurance Program. According to the ERP, any system that scores 11 or more points using the ETT is considered to be in significant non-compliance. Any new system with 11 or more points, receives a special review to ascertain why the non-compliance is occurring. KDHE evaluates whether the system's non-compliance is because of any short-coming in the new system permitting process or whether the non-compliance is due to other reasons, such as not following a proposed budget or providing proper training for the system's certified operator. According to the ETT, new systems permitted during the past 3 years did not have a score  $\geq 11$ . The new systems permitted during the time period 2018 through 2020 are listed in Table 2.

**Table 2 – New Systems Permits 2018 through 2020 ETT Status**

<b>Water System Number</b>	<b>PWS System Name</b>	<b>Permitted</b>	<b>ETT ≥ 11</b>	<b>Corrective Actions</b>
KS2004310	Doniphan CO RWD #6	SFY 18	No	N/A
KS2004515	Public Wholesale WSD 25	SFY 20	No	N/A

## **CAPACITY DEVELOPMENT STRATEGY FOR EXISTING SYSTEMS**

### **Strategy Background**

The Kansas Capacity Development Workgroup developed fifteen recommendations for KDHE to consider in implementing the Kansas Capacity Development Strategy for Existing Systems. KDHE selected eight (Table 3) of these recommendations for the initial implementation of its strategy. These eight recommendations were considered to have the greatest potential to generate significant capacity gains in a relatively short time. The remaining seven (Table 4) were considered for implementation as time and resources allowed. All fifteen recommendations have been implemented or amended. The changes are documented in Amendment 1 of the Capacity Development Strategy for Existing Public Water Supply Systems.

**Table 3 – Initial 8 Strategy Recommendations**

<b>Recommendation</b>	<b>Implementation Status</b>
TFM Surveys for all community water systems	Implemented – Conducted every 3 years
Require water use reports from all systems	Implemented – Required annually by DWR
Develop a PWS business planning guidebook	Implemented – Part of KanCap
Develop PWS finance training program	Implemented – KanCap/EFC Financial Tools
Require all systems to install customer meters	Change – Strategy Amendment 1, Item 4
Expand KDHE “Survival Guides” for PWS systems	Implemented – See website: <a href="http://www.kdheks.gov/pws/monitoringcompliance/monitoringcompliance.html">http://www.kdheks.gov/pws/monitoringcompliance/monitoringcompliance.html</a>
Develop Asset Management Planning Tool	Implemented – A. M. Kan Work!
Develop board/council member education program	Implemented – KanCap

**Table 4 – Remaining 7 Strategy Recommendations**

<b>Recommendation</b>	<b>Implementation Status</b>
Kansas Lawmakers information packets	Changed – Strategy Amendment 1, Item 2
“As Built” mapping assistance program	Changed – Strategy Amendment 1, Item 3
Encourage partnerships among PWS systems	Implemented – Planning Grant Program, PWS Coordinating Committee, participate in locally sponsored regional PWS planning activities
Develop drinking water public information program	Changed – Strategy Amendment 1, Item 5
Develop program to help select engineers/consultants	Implemented – Part of KanCap
Develop newsletter – KDHE spending, compliance, etc.	Changed – Strategy Amendment 1, Item 5
Third-party assessment of KDHE resource needs	Removed – Strategy Amendment 1, Item 6

In addition to state agency implementation activities, 3<sup>rd</sup> party technical assistance providers help public water supply systems address capacity challenges. KDHE sponsors technical assistance and training

through contracts with the Kansas Rural Water Association (KRWA), Kansas Municipal Utilities (KMU), Ranson Financial Group, and Wichita State University Environmental Finance Center (EFC).

Other technical assistance providers, including the Midwest Assistance Program (MAP), League of Kansas Municipalities (LKM), and Kansas Section American Water Works Association (KsAWWA) provide a variety of assistance to public water suppliers as part of their ongoing activities. These organizations are not under contract with KDHE. Their funding is provided from a variety of sources including EPA, USDA Rural Development, and membership fees. Their activities support the goals of the Kansas Capacity Development strategies for new and existing systems. All of the organizations mentioned above participated in development of the Kansas strategies and continue to provide input on KDHE implementation activities. Their activities are important to the overall success of the Capacity Development Program.

MAP provides planning assistance to water systems seeking funding from the USDA Rural Development programs for water and wastewater systems and also technical assistance to systems identified by KDHE and EPA. Funding for this assistance is provided by EPA. KsAWWA provides training to water system operators through its Operator Training Committee (OTC) and in partnership with KMU. KsAWWA also works with KDHE's Operator Certification Program to coordinate training activities. LKM provides training for city council/commission members, city managers/administrators and city clerks through the Municipal Leadership Academy. During SFY 2015 KanCap training was added to the list of elective courses available through the Municipal Leadership Academy. KDHE considers this an important addition to the Capacity Development Program. LKM also provides legal advice and model ordinances for cities in Kansas.

## **State Fiscal Year 2020 Programs and Implementation Activities**

### **Overview**

During SFY 2020, KMU and KRWA completed the third of their five-year training and technical assistance contracts. KMU's contract includes Operator In Training (OIT) technical assistance, Operator Training, Governing Body Education, and Planning and Permitting Assistance. KRWA's contract focuses on Operator Training. KRWA completed the second year of their two-year contract for the 2% technical assistance for Small Systems during SFY 2020. The Ranson Financial Group was awarded a five-year contract extension for rate setting and financial planning assistance in SFY 2018 and completed the third year of the contract extension in SFY 2020. WSU-EFC will also begin the third year of a five-year contract for training, facilitation services, and asset management technical assistance. Most of the Capacity Development Strategy recommendations are implemented through these contracts. KDHE funds Capacity Development Program grants and contracts from the SDWA Section 1452(k)(1) set-aside. Details for specific contract activities are discussed later in this report.

In addition to activities directly related to implementation of the recommendations in the State Capacity Development Strategy, the Capacity Development Program provides a variety of assistance to public water supply systems. This assistance includes presentations at workshops and conferences, attendance at board/council meetings, and telephone and email correspondence. KDHE tracks the number of systems that receive this assistance. This tracking information is sent to EPA's National Information Management System (NIMS). In SFY 2020, the Capacity Development Program reported to NIMS 591 public water supply system assistance contacts.

The Capacity Development Program also coordinates with other programs including the Source Water Protection and Operator Certification programs. The Capacity Development Program is also a member of the PWS Section Enforcement Team. The Enforcement Team meets quarterly to review the ETT. Technical assistance is offered to systems on the ETT to assist them in returning to compliance. The Capacity Development Program makes recommendations on actions related to the TFM capacity of the water systems on the ETT.

## **Planning Assistance**

### **Planning Grants**

The Capacity Development Program provides assistance for regional public water supply planning and for small water system planning to comply with drinking water regulations. The Regional PWS Planning Grant Program provides 50% matching funds for preliminary engineering studies that evaluate regional solutions to address public water supply system needs and challenges. The Small PWS System Planning Grant Program, initiated in SFY 2013, provides 50% matching funds for systems serving a population of 3,300 or less to address compliance and significant deficiency issues. Beginning in SFY 2016 the Capacity Development Program initiated an additional Small PWS System Planning Grant opportunity that provides 50% matching funds for systems serving a population of 10,000 or less to perform corrosion control studies.

KDHE uses SRF fees to provide funding for all three programs. The Regional PWS Planning Grant provides up to \$12,500.00 to match funding provided by the local project sponsors. No Regional PWS Planning Grants were awarded during SFY 2020. The Small PWS System Planning Grant provides up to \$5,000.00 to match funding provided by the qualifying small system. No Small PWS System grants were awarded during SFY 2020. A Small System Planning Grant to perform corrosion control studies was awarded to the City of Bonner Springs. Tables 4 through 5 list the status of grant agreements during SFY 2020.

**Table 4 – Regional PWS Planning Grant Projects**

<b>Project Sponsors</b>	<b>Systems Benefiting</b>	<b>Status</b>	<b>SFY</b>
NA	NA	NA	NA

**Table 5 – Small PWS Systems Pilot Project**

<b>System Name</b>	<b>Status</b>	<b>SFY</b>
NA	NA	NA

**Table 6 – Small PWS Systems Corrosion Control Studies**

<b>System Name</b>	<b>Status</b>	<b>SFY</b>
City of Bonner Springs	Grant was executed in SFY 2020.	2020

### **Drinking Water Protection Program**

During SFY 2016 the Capacity Development Program worked with the Watershed Management Section to develop guidance for the Drinking Water Protection Program (DWPP). The DWPP was added to the Strategy during SFY 2014 and can be found in Amendment 2 which is posted on the KDHE Capacity Development webpage. Initially, the DWPP will focus efforts on small groundwater systems with nitrate contamination. A technical team has been developed. Currently, there are eight (8) small systems that are participating. These include the Cities of Ford, Belle Plaine, Andale, Kanopolis, Copeland, Hoxie, Dighton, and Palmer. KDHE is also assisting the City of Canton and the City of Galva with compliance assistance with nitrate and arsenic contamination. Although they are not a part of the DWPP, similar methods are being used to address the contamination.

## **Financial Assistance**

### Financial Planning Assistance

In SFY 2020, Ranson Financial Consultants LLC provided financial planning and rate-setting assistance. Ranson provided rate-setting assistance using the Kansas Rate Checkup software for 8 public water supply systems. In addition to the initial rate review, Ranson provides 1 year of technical assistance at no charge to the systems. Water systems will be able to use Rate Checkup to help review budgets, rates and financial planning procedures. The software generates reports that will help the systems achieve and maintain financial capacity, including an analysis that illustrates the rates required to maintain long-term financial health to help keep the system in compliance.

The contracts with Ranson and the WSU-EFC include revision and maintenance of the Kansas Rate Check-up tool. The final version of Rate Check-up tool was released in SFY 2020.

## **Training Activities**

### KanCap Board/Council Education Program

KMU in partnership with the WSU-EFC and Ranson scheduled 6 KanCap workshops, one in each KDHE district. Four of the workshops were cancelled due to low registration and KMU was unable to reschedule several of them due to Covid-19. A total of 13 participants attended representing 8 systems. The current edition of the KanCap manual and an interactive CD was completed in SFY 2016. The KanCap Manual will be used during training activities and will certainly benefit the educational process for board and council members.

### A.M. Kan Work!

The WSU-EFC in partnership with KMU conducted 8 A.M. Kan Work training sessions, at least one in each KDHE district. A total of 78 participants attended representing 50 systems. The KDHE awards 5 hours of renewal credit for water and wastewater operators that complete the one-day workshop.

### Rate-setting and Financial Planning Workshops

Five rate-setting and financial planning workshops were conducted through a cooperative effort among KMU, WSU-EFC and Ranson. One workshop was scheduled in each of the KDHE districts. A total of 39 participants attended representing 26 systems. The primary audience for these sessions includes city clerks, managers and administrators. Operators are welcome to attend; however, no operator credit is awarded. Three Rate Check-up tool trainings were also held. A total of 15 participants attended representing 9 systems.

### Small Water System Operator Training

The Capacity Development Program in cooperation with the KDHE Operator Certification Program sponsored Small Water System Operator training assistance through contracts with KMU and KRWA. The workshops for operators focused on Emergency Planning, Distribution System Rules, and Surface Water Treatment. The focus of the training was to provide information relevant to operators working at Class 2 or smaller water systems.

KMU hosted 10 training workshops which were attended by 192 individuals representing 108 water systems. KRWA hosted 11 training workshops which were attended by 267 individuals representing 190 water systems. KMU also provides assistance to KDHE designated drinking water and wastewater OITs. KMU assisted 79 OITs during SFY 2020.

#### Planning and Permitting Assistance

KDHE refers systems to KMU to receive on-site and/or remote assistance related to development of emergency water supply plans, new public water supply system permits, and completion of assessments and surveys using the Public Water Supply Data Collector. KMU provided assistance to 10 water systems.

#### **Area Wide Optimization Program (AWOP)**

AWOP is a voluntary program whose primary goal is to maximize public health protection without major capital expenditure, through optimization of existing water treatment and distribution facilities. Optimization of the water system is achieved through enhanced process monitoring and control using existing staff and facilities. Presently Kansas's AWOP focuses on the optimization of conventional surface water treatment plant performance, measured relative to optimization goals.

During SFY 2019 the AWOP team began Performance Based Training (PBT) with the assistance of Process Applications, Inc. (PAI). The PBT series has 5 objectives:

1. Addressing the common performance-limiting factors identified in surface water treatment plants (e.g., application of concepts and testing to process control).
2. Improving the overall quality of performance data through the assessment of and improvements to data integrity.
3. Improving the finished water quality of the surface water treatment plants through the implementation of optimization techniques that protect customers from pathogenic organisms such as *Giardia* and *Cryptosporidium*.
4. Promoting a peer-to-peer exchange on technical, leadership, and management issues related to water treatment optimization.
5. Supporting the development of a training model that can be used as a basis for addressing other technical and managerial issues faced by surface water treatment plants.

The PBT series consists of Facilitator Training and six 1-day training sessions that occurs over a 14-16-month period. Facilitator Training and the first 2 sessions were held in SFY 2019. Four additional sessions were held in SFY 2020 on the following dates: August 13, 2019; November 20, 2019; February 12, 2020; and May 13, 2020. The series began with 5 participating systems; however, only 1 system attended all 6 sessions.

During SFY 2020 KDHE's AWOP team completed two Comprehensive Performance Evaluations (CPE). The first CPE was conducted October 21-25, 2019 at the City of Ottawa. The second CPE was conducted March 2-6, 2020 at Miami County Rural Water District 2. In addition, the KDHE's AWOP team participates in both remote and onsite quarterly regional meetings. Two or three AWOP team members were able to travel to the AWOP National Meeting in Cincinnati, Ohio August 6-7, 2019 and a quarterly AWOP meeting in Austin, Texas November 13-15, 2019. During SFY 2020 the team also presented findings from the City of Ottawa CPE.



## **Statewide Capacity Concerns**

Disinfection By-Product MCL violations are a growing concern with water systems in the state of Kansas. Consecutive systems are especially concerned as they have no control over the water that is delivered to them from their supplier. The AWOP team and other KDHE staff are collaborating with EPA Region 7, EPA Technical Support center, and Process Applications, Inc. with a Disinfection By-Product Reduction Project. The project includes a variety of water systems that have been out of compliance for Disinfection By-products. This includes surface water systems, surface water purchasing systems, and groundwater systems. The project consists of two training sessions led by Process Applications, Inc. and workshops designed to educate water system sand teach techniques to reduce Disinfection By-Products in their finished water.

Kansas is beginning to experience a lack of certified operators. An aging workforce that are beginning to retire accounts for a portion of this issue.

## **Other Related Activities**

The KDHE recognizes that other state agencies and non-governmental organizations play an important role in helping water systems achieve and maintain TFM capacity. Two organizations that KDHE frequently partner with are the Kansas Water Office (KWO) and KRWA. The KDHE and KWO routinely collaborate on regional public water supply issues and the provision of technical assistance to public water supply systems.

During SFY 2020, the KRWA provided technical assistance to 117 small public water supply systems under the 2% Small System Technical Assistance Set Aside contract. Assistance provided under this contract addressed many technical issues including surface water treatment, well testing, new operator assistance, nitrate compliance, and record keeping.

### **SRF Loan Application Reviews**

KDHE conducted reviews using elements from the Capacity Development Survey to ensure that all loan recipients demonstrate TFM capacity.

### **TFM Survey**

TFM Surveys were conducted June through August 2020. The surveys are conducted every 3 years in conjunction with the Report to the Governor. Of the 870 community water systems in Kansas, 568 completed the survey. TFM Survey results can be found in the Report to the Governor at the following <https://www.kdheks.gov/pws/capdev/reports.html>. The report was submitted to the Governor on September 22, 2020.

## **Strategy Review and Modification**

KDHE recognizes that periodic review and modification of the Strategy for Existing Systems is vital in keeping KDHE's Capacity Development Program current and relevant to the needs of Kansas public water supply systems. On January 29, 2020, KDHE conducted a stakeholder meeting to discuss amendments to the Capacity Development Strategy to encourage development/use of asset management plans, assist systems to implement asset management through training and technical assistance as required in the America's Water Infrastructure Act of 2018 (S 3021).

### **Future Activities**

The implementation activities scheduled for FY 2021 will focus on 5 primary areas: 1) Continue AWOP implementation through CPEs, Performance Based Training follow-up, and participation in regional meetings; 2) Continuation of DWPP; 3) Continue Operator training courses and Operator in Training assistance; 4) the KanCap training program; and 5) Implement a new Capacity Development Awards program.

In SFY 2021, KDHE plans to amend the Capacity Development Strategy to encourage development/use of asset management plans, assist systems to implement asset management through training and technical assistance as required in the America's Water Infrastructure Act of 2018 (S 3021).

Other ongoing activities include TFM reviews related to enforcement actions and SRF applications, new system application review and approval, training and technical assistance activities, and coordination on public water supply issues and projects with the Public Water Supply Coordinating Committee. KDHE will also continue to award planning grants as applications are received and approved.